

## MULTI-PANEL ELECTRONIC DEVICE

### CROSS-REFERENCE TO RELATED APPLICATIONS

**[0001]** The present disclosure claims the benefit of Provisional Application No. 61/095,225, filed Sep. 8, 2008 and 61/182,419 filed May 29, 2009, which is incorporated by reference herein in its entirety and to which priority is claimed.

### FIELD

**[0002]** The present disclosure is generally related to a multi-panel electronic device.

### DESCRIPTION OF RELATED ART

**[0003]** Advances in technology have resulted in smaller and more powerful computing devices. For example, there currently exist a variety of portable personal computing devices, including wireless computing devices, such as portable wireless telephones, personal digital assistants (PDAs), and paging devices that are small, lightweight, and easily carried by users. More specifically, portable wireless telephones, such as cellular telephones and internet protocol (IP) telephones, can communicate voice and data packets over wireless networks. Further, many such portable wireless telephones include other types of devices that are incorporated therein. For example, a portable wireless telephone can also include a digital still camera, a digital video camera, a digital recorder, and an audio file player. Also, such wireless telephones can process executable instructions, including software applications, such as a web browser application, that can be used to access the Internet. As such, these portable wireless telephones can include significant computing capabilities.

**[0004]** Although such portable devices may support software application, the usefulness of such portable devices is limited by a size of a display screen of the device. Generally, smaller display screens enable devices to have smaller form factors for easier portability and convenience. However, smaller display screens limit an amount of content that can be displayed to a user and may therefore reduce a richness of the user's interactions with the portable device.

### SUMMARY

**[0005]** In a particular embodiment, an electronic device is disclosed that includes multiple folding display panels. When fully extended, the electronic device can provide an extended larger display. When fully folded to a closed position, the electronic device can provide a small form factor and still provide an abbreviated view similar to a cell phone. In general, the multiple folding display panels enable the electronic device to be used as multiple types of devices depending on how the electronic device is folded or configured. By enabling the electronic device to be positioned in multiple foldable configurations, a user of the electronic device may elect to have a small form factor for easy maneuverability and functionality or may elect an expanded, larger form factor for displaying rich content and to enable interaction with one or more software applications via expanded user interfaces.

**[0006]** For example, the determined configuration may include a fully folded configuration, a fully extended configuration, a thumbing configuration, a travel clock configuration, a video conferencing configuration, or one or more other configurations. In a particular embodiment, a processor in the

electronic device can execute applications across the first, second, and third display surfaces in the fully extended configuration and can execute applications at the first display surface in the fully folded configuration.

**[0007]** Occasionally, a multi-display apparatus may attempt to display an image that is larger than any individual display surface. On such occasions, the multi-display apparatus may elect to "split" the image along the boundaries of the display surfaces. Due to the intervening gap between display surfaces, the image geometry may be adjusted to accommodate the gap and in this case the image may appear stretched. Alternately, the multi-display device may elect to preserve the original image geometry by "hiding" a portion of the image that corresponds to the gap between display surfaces. However, hiding a portion of the image may result in the loss of valuable information (e.g., one or more characters of text).

**[0008]** In a particular embodiment, a method is disclosed that includes displaying an image at an electronic device that includes a first display surface and a second display surface. The first display surface and the second display surface are separated by a gap. A first portion of the image is displayed at the first display surface, a second portion of the image is displayed at the second display surface, and a third portion of the image between the first portion and the second portion is not displayed. The method includes detecting a movement of the electronic device, and in response to detecting the movement, the third portion of the image is displayed at the second display surface.

**[0009]** In another particular embodiment, an apparatus is disclosed that includes a first display surface and a second display surface. The second display surface is proximate to the first display surface and separated from the first display surface by a gap. The apparatus also includes a display module. The display module is configured to display an image in an original state, by displaying a first portion of the image at the first display surface, displaying a second portion of the image at the second display surface, and not displaying a third portion of the image between the first portion and the second portion. The apparatus further includes a motion sensor configured to detect a movement of the apparatus. The display module is further configured to display the image in a modified state in response to the detected movement, such as by temporally displaying the third portion of the image at the second display surface.

**[0010]** One particular advantage provided by at least one of the disclosed embodiments is enabling a user to control (e.g., via or use movement of the device) when a multi-display device "splits" an image along a gap (thereby displaying the entire image in a distorted geometry) and when the multi-display device "hides" a portion of the image corresponding to the gap (thereby preserving the image geometry but not displaying the entire image).

**[0011]** Other aspects, advantages, and features of the present disclosure will become apparent after review of the entire application, including the following sections: Brief Description of the Drawings, Detailed Description, and the Claims.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0012]** FIG. 1 is a diagram of a first illustrative embodiment of an electronic device;

**[0013]** FIG. 2 is a diagram of an illustrative embodiment of the electronic device of FIG. 1 in a fully folded configuration;